Volume 11, 1992

Journal of Plant Growth Regulation

Published in cooperation with the International Plant Growth Substances Association and the Plant Growth Regulator Society of America

Thomas C. Moore, *Editor-in-Chief*
Department of Botany and Plant Pathology
Cordley Hall 2082
Oregon State University
Corvallis, OR 97331-2902, USA
FAX: 503-737-3573

Editorial Board

Donald J. Armstrong
Department of Botany and Plant Pathology
Cordley Hall 2082
Oregon State University
Corvallis, OR 97331-2902, USA
FAX: 503-737-3573

Gerard W. M. Barendse
Department of Experimental Botany
Laboratory of Plant Molecular Physiology
University of Nijmegen
Toernooiveld, 6525 ED Nijmegen
The Netherlands
FAX: 31-080-553450

Ronald C. Coolbaugh
Department of Botany and Plant Pathology
Purdue University
West Lafayette, IN 47907, USA
FAX: 317-494-0363

Horace G. Cutler
USDA, ARS
Richard B. Russell Research Center
P.O. Box 5677
Athens, GA 30613, USA
FAX: 706-546-3367

Thomas J. Gianfagna
Department of Horticulture
Rutgers University
New Brunswick, NJ 08903, USA
FAX: 908-932-9441

Arthur R. Grossman
Carnegie Institution of Washington
Plant Biology Department
290 Panama Street
Stanford, CA 94305, USA
FAX: 415-325-6857

Gretchen Hagen
Department of Biochemistry
117 Schweitzer Hall
University of Missouri
Columbia, MO 65211, USA
FAX: 314-882-5635

Tuan-hua David Ho
Department of Biology
Washington University
St. Louis, MO 63130, USA
FAX: 314-935-4432

Roger Horgan
Department of Biological Sciences
The University College of Wales
Aberystwyth, Dyfed SY23 3DA
United Kingdom
FAX: 44-0970-622350

Alan Jones
Department of Biology
University of North Carolina
Chapel Hill, NC 27599-3280, USA
FAX: 919-962-1625

Noboru Murofushi
Department of Agricultural Chemistry
The University of Tokyo
Bunkyo-ku, Tokyo 113, Japan
FAX: 81-3-3812-0544

Bernard O. Phinney, *ex officio*
President of the IPGSA
Department of Biology
University of California
405 Hilgard Avenue
Los Angeles, CA 90024-1009, USA
FAX: 213-206-3987

B. W. Poovaiah
Department of Horticulture and Landscape Architecture
Washington State University
Pullman, WA 99164, USA
FAX: 509-335-8690

Paul E. Read, *ex officio*
Chairman of the PGRSA
Department of Horticulture
University of Nebraska
Lincoln, NE 68583-0724, USA
FAX: 402-472-2853

James B. Reid
Department of Plant Science
University of Tasmania
Hobart, Tasmania, 7001
Australia
FAX: 61-002-202698

Günther Sembdner
Institut für Biochemie der Pflanzen
O-4010 Halle (Saale), Weinberg 3
Postfach 250, FRG
FAX: 37-46-651649

Valerie M. Sponsel
Department of Biology
Indiana University
Jordan Hall 118
Bloomington, IN 47405, USA
FAX: 812-855-6705

E. W. Weiler
Ruhr-Universität Bochum
Fakultät für Biologie
Lehrstuhl für Pflanzenphysiologie
Postfach 102148
D4630 Bochum 1, FRG
FAX: 0234-7094-187

Shang Fa Yang
Department of Vegetable Crops
Mann Laboratory
University of California
Davis, CA 95616, USA
FAX: 916-752-4554

The exclusive copyright for all languages and countries, including
the right for photomechanical and any other reproductions, also
in microform, is transferred to the publisher.
The use of registered names, trademarkes, etc. in this publication
does not imply, even in the absence of a specific statement,
that such names are exempt from the relevant protective laws
and regulations and therefore free for general use.
Printed in the United States of America
© 1992 by Springer-Verlag New York Inc.

Index To Volume 11, 1992

Abdelnour-Esquivel, A., Kaminek, M., Armstrong, D. J.: Inhibition of Dopamine-β-Hydroxylase by Cytokinins 221

Acosta, M., see Botía, J. M., et al. 135

Alexieva, V., see Todorov, D., et al. 233

Amritphale, D., Singh, B., Gutch, A.: Inhibition of Red Light-Induced Seed Germination by Indole-3-Acetic Acid in *Hygrophila auriculata* 203

Andrews, C. J., see Morrison, M. J. 113

Armstrong, D. J., see Abdelnour-Esquivel, A., et al. ... 221

Baird, L. M., Reid, P. D.: Cellulase Activity and Localization During Abscission of *Coleus blumei* 129

Bernhard, U., see Schneider, G., et al. 15

Blevins, D. G., see Dobert, R. C., et al. 155

Blom, C. W. P. M., see Voesenek, L. A. C. J., et al. .. 171

Boag, T. S., see Burrows, G. E., et al. 189

Bortolo, R., see Scacchi, A., et al. 39

Botía, J. M., Ortuño, A., Acosta, M., Sabater, F., Sánchez-Bravo, J.: Influence of 2,3,5-Triiodobenzoic Acid on the Transport and Metabolism of IAA in Lupin Hypocotyls 135

Brock, T. G., Burg, J., Ghosheh, N. S., Kaufman, P. B.: The Role of Calcium in Growth Induced by Indole-3-Acetic Acid and Gravity in the Leaf-Sheath Pulvinus of Oat (*Avena sativa*) 99

Bukovac, M. J., see Quesada, M. A., et al. 1

Burg, J., see Brock, T. G., et al. 99

Burrows, G. E., Boag, T. S., Stewart, W. P.: Changes in Leaf, Stem, and Root Anatomy of Chrysanthemum cv. Lillian Hoek Following Paclobutrazol Application 189

Cassani, G., see Scacchi, A., et al. 39

Cloud, N. P., see Li, X., et al. 55

Cole, J. C., see Frymire, R. M. 143

Cooke, D. T., see Martínez-Cortina, C., et al. 195

Dobert, R. C., Rood, S. B., Blevins, D. G.: Rhizobial-Induced Increase in Internode Length and Indentification of Endogenous GAs of Cowpea (*Vigna unguiculata* [L.] Walp) Stems and Nodules 155

Fletcher, R. A., see Kraus, T. E., et al. 47

Frymire, R. M., Cole, J. C.: Uniconazole Effect on Growth and Chlorophyll Content of Pyracantha, Photinia, and Dwarf Burford Holly 143

Frymire, R. M., Henderson-Cole, J. C.: Effect of Uniconazole and Limited Water on Growth, Water Relations, and Mineral Nutrition of "Lalandei" Pyracantha 227

Ghosheh, N. S., see Brock, T. G., et al. 99

Gogala, N., see Ravnikar, M., et al. 29

Good, N. E., see Magnus, V., et al. 19

Good, N. E., see Magnus, V., et al. 67

Gutch, A., see Amritphale, D., et al. 203

Hangarter, R. P., see Magnus, V., et al. 19

Hangarter, R. P., see Magnus, V., et al. 67

Harren, F. J. M., see Voesenek, L. A. C. J., et al. 171

Hauck, C., see Müller, S., et al. 77

Hazebroek, J. P., see Steffens, G. L., et al. 165

Henderson-Cole, J. C., see Frymire, R. M. 227

Heredia, A., see Quesada, M. A., et al. 1

Hofstra, G., see Kraus, T. E., et al. 47

Huang, G. Q., see Zhao, Z. R., et al. 209

James, C. S., see Martínez-Cortina, C., et al. 195

Jarvis, B. B., see Kuti, J. O. 149

Jensen, E., see Schneider, G., et al. 15

Jiang, C.-Z., see Li, X., et al. 55

Kaminek, M., see Abdelnour-Esquivel, A., et al. 221

Karanov, E., see Todorov, D., et al. 233

Kaufman, P. B., see Brock, T. G., et al. 99

Kikuta, Y., see Koda, Y., et al. 215

Koda, Y., Takahashi, K., Kikuta, Y.: Potato Tuber-Inducing Activities of Salicylic Acid and Related Compounds 215

Kraus, T. E., Murr, D. P., Hofstra, G., Fletcher, R. A.: Modulation of Ethylene Synthesis in Acotyledonous Soybean and Wheat Seedlings 47

Kuti, J. O., Jarvis, B. B.: Growth Hormone-Like Activities of Macrocyclic Trichothecenes in In Vitro Callus Induction and Growth of Four *Baccharis* Species 149

La Motte, C. E., see Li, X., et al. 55

Lawrence, N. L., Ross, J. J., Mander, L. N., Reid, J. B.: Internode Length in Pisum. Mutants *lk*, *lka*, and *lkb* do not Accumulate Gibberellins 35

Leon, D., see Neumann, P. M. 119

Li, G. R., see Zhao, Z. R., et al. 209

Li, X., La Motte, C. E., Stewart, C. R., Cloud, N. P., Wear-Bagnall, S., Jiang, C.-Z.: Determination of IAA

and ABA in the Same Plant Sample by a Widely Applicable Method Using GC-MS with Selected Ion Monitoring 55

Lin, J. T., see Steffens, G. L., et al. 165

Machmudova, A., see Reinbothe, S., et al. 7

Magnus, V., Hangarter, R. P., Good, N. E.: Interaction of Free Indole-3-Acetic Acid and Its Amino Acid Conjugates in Tomato Hypocotyl Cultures 67

Magnus, V., Nigović, B., Hangarter, R. P., Good, N. E.: *N*-(Indol-3-ylacetyl)Amino Acids as Sources of Auxin in Plant Tissue Culture 19

Mander, L. N., see Lawrence, N. L., et al. 35

Mangnus, E. M., Stommen, P. L. A., Zwanenburg, B.: A Standardized Bioassay for Evaluation of Potential Germination Stimulants for Seeds of Parasitic Weeds 91

Martínez-Cortina, C., Ros, R., Cooke, D. T., James, C. S., Sanz, A.: The Lipid Composition, Fluidity, and Mg^{2+}-ATPase Activity of Rice (*Oryza sativa* L. cv. Bahia) Shoot Plasma Membranes: Effects of ABA and GA_3 195

Metzger, J. D., see Steffens, G. L., et al. 165

Morrison, M. J., Andrews, C. J.: Variable Increases in Cold Hardiness Induced in Winter Rape by Plant Growth Regulators 113

Müller, S., Hauck, C., Schildknecht, H.: Germination Stimulants Produced by *Vigna unguiculata Walp* cv Saunders Upright 77

Murr, D. P., see Kraus, T. E., et al. 47

Neumann, P. M., Leon, D.: Physical Restraints Underlying Short-Term Inhibition by Auxin of Root Elongation in Intact Maize Seedlings 119

Nielsen, E., see Scacchi, A., et al. 39

Nigović, B., see Magnus, V., et al. 19

Ortuño, A., see Botía, J. M., et al. 135

Parthier, B., see Reinbothe, S., et al. 7

Pirali, G., see Scacchi, A., et al. 39

Quesada, M. A., Sánchez-Roldán, C., Heredia, A., Valpuesta, V., Bukovac, M. J.: Peroxidase and IAA Oxidase Activities and Peroxidase Isoenzymes in the Pericarp of Seeded and Seedless "Redhaven" Peach Fruit 1

Ravnikar, M., Vilhar, B., Gogala, N.: Stimulatory Effects of Jasmonic Acid on Potato Stem Node and Protoplast Culture 29

Reid, J. B., see Lawrence, N. L., et al. 35

Reid, P. D., see Baird, L. M. 129

Reinbothe, C., see Reinbothe, S., et al. 7

Reinbothe, S., Machmudova, A., Wasternack, C., Reinbothe, C., Parthier, B.: Jasmonate-Induced Proteins in Cotton: Immunological Relationship to the Respective Barley Proteins and Homology of Transcripts to Late Embryogenesis Abundant (Lea) mRNAs 7

Rood, S. B., see Dobert, R. C., et al. 155

Ros, R., see Martínez-Cortina, C., et al. 195

Ross, J. J., see Lawrence, N. L., et al. 35

Sabater, F., see Botía, J. M., et al. 135

Sánchez-Bravo, J., see Botía, J. M., et al. 135

Sánchez-Roldán, C., see Quesada, M. A., et al. 1

Sanz, A., see Martínez-Cortina, C., et al. 195

Scacchi, A., Bortolo, R., Cassani, G., Pirali, G., Nielsen, E.: Detection, Characterization, and Phytotoxic Activity of the Nucleoside Antibiotics, Blasticidin S and 5-Hydroxylmethyl-Blasticidin S 39

Schildknecht, H., see Müller, S., et al. 77

Schneider, G., Sembdner, G., Jensen, E., Bernhard, U., Wagenbreth, D.: GC-MS Identification of Native Gibberellin-O-Glucosides in Pea Seeds 15

Sembdner, G., see Schneider, G., et al. 15

Singh, B., see Amritphale, D., et al. 203

Smyth, D. A.: Effect of Methylxanthine Treatment on Rice Seedling Growth 125

Stafford, A. E., see Steffens, G. L., et al. 165

Steffens, G. L., Lin, J. T., Stafford, A. E., Metzger, J. D., Hazebroek, J. P.: Gibberellin Content of Immature Apple Seeds from Paclobutrazol-Treated Trees over Three Seasons 165

Sterrett, J. P., see Tworkoski, T. J. 105

Stewart, C. R., see Li, X., et al. 55

Stewart, W. P., see Burrows, G. E., et al. 189

Stommen, P. L. A., see Mangnus, E. M., et al. 91

Takahashi, K., see Koda, Y., et al. 215

Todorov, D., Alexieva, V., Karanov, E., Velichkov, D., Velikova, V.: Effect of Certain Dicarboxylic Acid Monoesters on Growth, Chlorophyll Content, Chlorophyllase and Peroxidase Activities, and Gas-Exchange of Young Maize Plants 233

Tworkoski, T. J., Sterrett, J. P.: Phytotoxic Effects, Regrowth, and ^{14}C-Sucrose Translocation in Canada Thistle Treated with Mefluidide, Flurprimidol, and Systemic Herbicides 105

Valpuesta, V., see Quesada, M. A., et al. 1

van der Sman, A. J. M., see Voesenek, L. A. C. J., et al. 171

Velichkov, D., see Todorov, D., et al. 233

Velikova, V., see Todorov, D., et al. 233

Vilhar, B., see Ravnikar, M., et al. 29

Voesenek, L. A. C. J., van der Sman, A. J. M., Harren, F. J. M., Blom, C. W. P. M.: An Amalgamation Between Hormone Physiology and Plant Ecology: A Review on Flooding Resistance and Ethylene 171

Vu, J. C. V., Yelenosky, G.: Growth and Photosynthesis of Sweet Orange Plants Treated with Paclobutrazol 85

Wagenbreth, D., see Schneider, G., et al. 15

Wasternack, C., see Reinbothe, S., et al. 7

Wear-Bagnall, S., see Li, X., et al. 55

Wu, Z. L., see Zhao, Z. R., et al. 209

Yelenosky, G., see Vu, J. C. V. 85

Zhao, Z. R., Wu, Z. L., Huang, G. Q., Li, G. R.: An Improved Disk Bioassay for Determining Activities of Plant Growth Regulators 209

Zwanenburg, B., see Mangnus, E. M., et al. 91